

Application No.: 10/668,757

Case No.: 57801US004

REMARKS

Claims 1-33 are pending. Reconsideration of the application in view of the following remarks is respectfully requested.

I. Claims 1-6, 10-22, and 26-33 are Not Obvious over Gaeta 713 in view of Friedlander

Claims 1-6, 10-22, and 26-33 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Gaeta et al.(WO 97/36713) ("Gaeta 713") in view of Friedlander et al. (U.S. 5,536,760). Applicants request reconsideration of this rejection because neither Gaeta 713 nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic as recited in Applicants' claims.

Applicants' claimed invention comprises **microspheres** of aluminosilicate ceramic filler for use as a filler in an abrasive article. The shape and size of the microspheres allow higher filler loadings without significant increases in viscosity (see Applicants' specification at page 5, lines 14-16; see also page 16, lines 18-22 and the viscosity data presented in Tables 4, 7, 9, 12, and 13). Neither Gaeta 713 nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic to help control viscosity as filler loadings are increased. For at least this reason, the rejection of claims 1-6, 10-22, and 26-33 under 35 U.S.C. § 103(a) as allegedly being obvious over Gaeta 713 in view of Friedlander et al. should be withdrawn.

II. Claims 1-6, 10-14, and 33 are Not Obvious over Gaeta 070 in view of Gaeta 713 and Friedlander

Claims 1-6, 10-14, and 33 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Gaeta et al. (U.S. 6,187,070)("Gaeta 070") in view of Gaeta et al.(WO 97/36713) ("Gaeta 713") and Friedlander et al. (U.S. 5,536,760). Applicants request reconsideration of this rejection because neither Gaeta 070, Gaeta 713, nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic as recited in Applicants' claims.

As discussed above, Applicants' claimed invention comprises **microspheres** of aluminosilicate ceramic filler for use as a filler in an abrasive article. The Office Action alleges

Application No.: 10/668,757

Case No.: 57801US004

that since the references fail to mention any specific shapes, this constitutes a broad teaching of shapes, absent evidence to the contrary. Although Applicants do not necessarily agree, Applicants have provided ample evidence in their specification concerning the shape of the microspheres of aluminosilicate ceramic in their claimed invention. The shape and size of the microspheres allow higher filler loadings without significant increases in viscosity (see Applicants' specification at page 5, lines 14-16; see also page 16, lines 18-22 and the viscosity data presented in Tables 4, 7, 9, 12, and 13). Neither Gaeta 070, Gaeta 713, nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic to help control viscosity as filler loadings are increased. For at least this reason, the rejection of claims 1-6, 10-14, and 33 under 35 U.S.C. § 103(a) as allegedly being obvious over Gaeta 070 in view of Gaeta 713 and Friedlander et al. should be withdrawn.

III. Claims 1-6, 10-22, and 26-33 are Not Obvious over Zador in view of Friedlander

Claims 1-6, 10-22, and 26-33 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Zador et al. (U.S. 5,011,513) in view of Friedlander et al. (U.S. 5,536,760). Applicants request reconsideration of this rejection because neither Zador et al. nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic as recited in Applicants' claims.

As discussed above, Applicants' claimed invention comprises **microspheres** of aluminosilicate ceramic filler for use as a filler in an abrasive article. The Office Action alleges that the shape of the filler is not seen to provide any weight to the composition claimed absent evidence to the contrary. The Office Action further alleges that since the references fail to mention any specific shapes, this constitutes a broad teaching of shapes, absent evidence to the contrary. Although Applicants do not necessarily agree, Applicants have provided ample evidence in their specification concerning the shape of the microspheres of aluminosilicate ceramic in their claimed invention. The shape and size of the microspheres allow higher filler loadings without significant increases in viscosity (see Applicants' specification at page 5, lines 14-16; see also page 16, lines 18-22 and the viscosity data presented in Tables 4, 7, 9, 12, and 13). Neither Zador et al. nor Friedlander et al. teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic to help control viscosity as filler loadings are increased.

Application No.: 10/668,757

Case No.: 57801US004

For at least this reason, the rejection of claims 1-6, 10-22, and 26-33 under 35 U.S.C. § 103(a) as allegedly being obvious over Zador et al. in view of Friedlander et al. should be withdrawn.

IV. Claims 1-33 are Not Obvious over Klun

Claims 1-33 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Klun et al. (EP 0 654 323). Applicants request reconsideration of this rejection because Klun et al. do not teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic as recited in Applicants' claims.

As discussed above, Applicants' claimed invention comprises **microspheres** of aluminosilicate ceramic filler for use as a filler in an abrasive article. The Office Action alleges that the shape of the filler is not seen to provide any weight to the composition claimed absent evidence to the contrary. The Office Action further alleges that since the references fail to mention any specific shapes, this constitutes a broad teaching of shapes, absent evidence to the contrary. Although Applicants do not necessarily agree, Applicants have provided ample evidence in their specification concerning the shape of the microspheres of aluminosilicate ceramic in their claimed invention. The shape and size of the microspheres allow higher filler loadings without significant increases in viscosity (see Applicants' specification at page 5, lines 14-16; see also page 16, lines 18-22 and the viscosity data presented in Tables 4, 7, 9, 12, and 13). Klun et al. do not teach or suggest an abrasive article comprising microspheres of aluminosilicate ceramic to help control viscosity as filler loadings are increased. For at least this reason, the rejection of claims 1-33 under 35 U.S.C. § 103(a) as allegedly being obvious over Klun et al. should be withdrawn.

Application No.: 10/668,757

Case No.: 57801US004

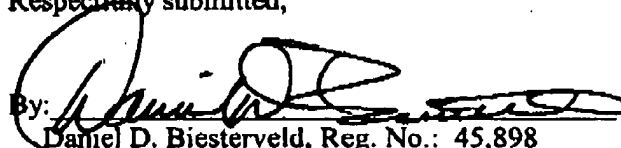
V. Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. The Examiner is invited to contact Applicants' undersigned representative with any questions concerning Applicants' application

Respectfully submitted,

December 16, 2004
Date

By:


Daniel D. Biesterveld, Reg. No.: 45,898
Telephone No.: (651) 737-3193

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833